Maintenance of Small Hydroelectric (Cont.)

CZECH/2788

lubrication, and cooling problems. The final part is devoted to the automatic control of small hydroelectric power plants and of faults occurring in them. The book is based on the lecture notes of the authors: Danihelka, Hrdy, Jurecka, Kunc, Pisl and Stastny. These notes conform to the standard educational program of the Ministry of Fuels and Power Engineering, and outline the technical minimum for professional schools on hydroelectric power plants. In the text specialized publications and advice of the following persons were utilized: Jaroslav Čabelka, Doctor of Engineering; Jan Kieswetter, Doctor of Engineering; Ctirad Nahlovsky, Engineer; Miroslav Nechleba, Doctor of Engineering; Svatopluk Nemeček, Engineer; and Ladislav Reiss, Engineer. The authors recommend the application of regulations in the operation of hydroelectric power stations, safety rules, regulations of the Elektrotechnický Svaz Československy (Czechoslovak Association of Electrical Engineers), and CSN standards. There are 42 references, all Czech.

TABLE OF CONTENTS:

Foreword

Card 2/12

5

CIA-RDP86-00513R000618220013-8" APPROVED FOR RELEASE: 09/21/2001

19-1.		
mali	ntenance of Small Hydroelectric (Cont.) CZECH/2788	
I.	Introduction	7
A.	Water Power	9
в.	Hydropower Engineering in CSR	11
C.	Earning Capacity of Hydroelectric Power Plants	14
D.	Planned Utilization of Water Power	14
E.	Importance of Hydroelectric Power Plants	18
II.	Economy of Hydroelectric Power Plants and Their Joint Operation With Steam Plants	21
A.	Economy of Hydroelectric Plants	21
в.	Joint Operation of Hydro- and Steam-electric Power Plants	26
Card	1 3/12	

Maintenance of Small Hydroelectric (Cont.) CZECH/278	8
III. Decisions on the Water Economy of Hydroelectric Power Plants	30
A. Run-of-River Plant	30
B. Storage Plant	38
C. Selection of the Economic Capacity of a Storage Plant	42
IV. Water Wheels and Their Main Components	48
A. Types of Water Wheels 1. Gravity water wheels 2. Hydraulic turbines a) Francis turbine b) Propeller turbine c) Kaplan turbine d) Pelton turbine	48 48 51 56 58
<ul> <li>B. Main Advantages of Hydraulic Turbines</li> <li>1. Power and efficiency</li> <li>2. Total and net head</li> </ul>	60 60 63
Card 4/12 ·	- 5

Maintenance of Small Hydroelectric (Cont.)  3. Hydraulic similarity of turbines 4. Measured revolutions of turbines 5. Turbine with varying head and changing Q [flow]  68  C. Main Turbine Components 1. Speed regulator [governor] 2. Synchronous [outlet] valve 3. Lubrication units 4. Air admission valves [relief valves] 7. Turbine shaft 6. Stuffing boxes 7. Couplings 8. Suspension bearing 9. Guide bearing and its location 10. Suspension framework 11. Draft tube 12. Gearing  D. Cavitation  84  Card 5/12			A A A A A A A A A A A A A A A A A A A	
3. Hydraulic similarity of turbines 4. Measured revolutions of turbines 5. Turbine with varying head and changing Q [flow]  C. Main Turbine Components 1. Speed regulator [governor] 2. Synchronous [outlet] valve 3. Lubrication units 4. Air admission valves [relief valves] 5. Turbine shaft 6. Stuffing boxes 7. Couplings 8. Suspension bearing 9. Guide bearing and its location 10. Suspension framework 11. Draft tube 12. Gearing  84  66  67  67  69  67  69  69  70  69  71  70  71  71  72  73  74  88  81  19  99  90  100  101  101  102  103  104  105  105  106  107  108  108  109  109  100  100  100  100				
4. Measured revolutions of turbines 5. Turbine with varying head and changing Q [flow]  68  C. Main Turbine Components 1. Speed regulator [governor] 2. Synchronous [outlet] valve 3. Lubrication units 4. Air admission valves [relief valves] 5. Turbine shaft 6. Stuffing boxes 7. Couplings 8. Suspension bearing 9. Guide bearing and its location 10. Suspension framework 11. Draft tube 12. Gearing  84  C. Main Turbine Components 69 69 69 69 69 69 69 69 69 69 69 69 69		Mainte	enance of Small Hydroelectric (Cont.)	cz <b>e</b> ch/2788
1. Speed regulator [governor] 2. Synchronous [outlet] valve 3. Lubrication units 4. Air admission valves [relief valves] 5. Turbine shaft 6. Stuffing boxes 7. Couplings 8. Suspension bearing 9. Guide bearing and its location 10. Suspension framework 11. Draft tube 12. Gearing 84  D. Cavitation 85  86  87  70  71  72  73  74  75  87  88  81  81  82	•	4.	Measured revolutions of turbines	67
		1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12.	Speed regulator [governor] Synchronous [outlet] valve Lubrication units Air admission valves [relief valves] Turbine shaft Stuffing boxes Couplings Suspension bearing Guide bearing and its location Suspension framework Draft tube Gearing vitation	69 69 70 71 73 74 77 79 81 81 82

	2788
V. Lubrication Units, Filters, and Coolers Used in Hydraulic Turbines	88
A. Selection of Lubrication Units  1. Horizontal turbines  2. Vertical turbines  3. Lubricating methods	88 88 90 92 92 94 101 102 1,02 104 108
<ul> <li>B. Selection of Lubricants</li> <li>1. Oil testing</li> <li>2. Nonprofessional tests</li> <li>3. Laboratory tests</li> <li>4. Instructions on the selection and use of lubricants (table)</li> </ul>	109 110 111 112

#### APPROVED FOR RELEASE: 09/21/2001 CIA-RDP86-00513R000618220013-8" Maintenance of Small Hydroelessor (Come.) CZECH/2788 Operation of Lubrication Union 113 D. Maintenance of Lubricating Machinery and of Lubricarta 118 Maintenance of lubricating machinery Maintenance of lubricants 118 120 VI. Bearings of Hydraulic Turbines 123 A. Introduction 123 B. Control of Bearings 123 1. Selection of bearings 123 2. Material of bearings 124 3. Operation of bearings 126 4. Temperature of bearings 127 5. Cooling equipment 130 Maintenance and repair or bearings 131 C. Faults in the Operation of Antifriction Bearings 132 Card 7/12

Marine	enance of Small Hydroelectric (Cont.)	ozech/2788
1.	Scaling off on the surface	,
2.	Cracks and fractures	1,
3.	Cavities and impressions	1
4.	Abrasions	1
3. 4. 5. 6.	Wearing	1
6.	Forming of craters and growes	1 1
7.	Rusting	1. 1
8.	Damaging the bearing cage	1
D. Mo	unting and Dismantling of Antifriction Bearings	
Re	pair	
1.	Fittings of bearings	1
2.	Play in the bearings	1
3•	Structure of the bearing with consideration to	1)
1.	and dismantling	1
4.	The second secon	$\overline{1}$
5.	Cleaning the components parts	$\tilde{\mathbf{i}}^{i}$
6.		1,1
<b>6</b> •	Greasing bearing components before mounting	1,1
9.	Filling with lubricants	1,
		12
70.	Information concerning mounting	11

Maintenance of Small Hydron) entrie (Cont.)	ICB/2788
VII. Penstocks, Trash Racks, and Gates and Values	141
A. Penstocks 1. Cast iron penstocks 2. Steel penstocks 3. Wooden penstocks 4. Reinforced-concrete penstocks	144 145 149 150
3. Protection of Penstocks 1. Surge tank 2. Safety valve 3. Piston safety valve 4. Pressure-regulating device	151 151 153 153
C. Penstocks for Idle Water	153
O. Trash Racks	154
3. Operation and Maintenance of Penstocks and Trash Rack	s 155

Maintenance of Small Hydroelectric (Cont.) CZECH/2/	<sup>7</sup> 88
F. Gates 1. Vertical-lift gates 2. Tainter gates 3. Rolling gates 4. Hinged-leaf gates	156 156 157 158 159
<ul> <li>G. Penstock Valves</li> <li>1. Flap valves [butterfly valves]</li> <li>2. Inside-screw-type gate valve</li> <li>3. Ball valve</li> <li>4. Needle valve (Johnson valve)</li> </ul>	159 159 160 161 163
H. Operation and Maintenance of Penatock Gates and Values	163
VIII. Automatic Hydroelectric Power Stations	164
A. Introduction	164
<ul> <li>B. Description of the Equipment of Complete Automation</li> <li>1. Devices for automatic operation</li> <li>2. Devices for automatic synchronization and phase control</li> <li>3. Control and auxiliary devices</li> <li>Card 10/12</li> </ul>	165 168 168 169

Maintenance of Small Hydroelette: "Cont.) CZECH/2	2788
4. Starting turbing order the	171
5. Stopping turbice operation 6. Switching over from carbine to sump operation	173 173
	174
7. Switching over from pump to turbine operation 8. Stopping pump operation	174
8. Stopping pump operation	<b>41</b> ·
9. Stopping under failures and quick manual shutting-off of the "danger" switich from the station control room	175
<ul> <li>IX. Automatic Fault Control in Small Hydroelectric Power Station With Synchronous Generators</li> <li>1. Introduction</li> <li>2. Principles of automatic Fault control in hydroelectric power stations</li> <li>3. Technical equipment of the power station for automatic fault control</li> <li>4. Description of control cells</li> <li>5. Equipment of control cells</li> <li>6. Description of operations of automatic fault control</li> <li>7. Sequence of operations in automatic fault control</li> </ul>	177 177 :

HRDY, J.

Assistance of machine-tractor stations in the mechanization of livestock production. p. 115 MECHANISACE ZEMEDELSTVI. Vol. 5, No. 6, Mar. 1955

SO: Monthly East European Accession, (EEAL), LC, Vol. 4, No. 9, Sept. 1955 Uncl.

HRDY, J.

Process of maintaining milking apparatus. p. 133. 83rd birthday of Josef Cerny. p. 135. MECHANISACE ZEMEDELSTVI, Praha, Vol. 5, no. 7, Apr. 1955.

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 4, no. 10, Oct. 1955, Uncl.

HRDY, J.

"Let us prepare in time the mobile scalding units."

MECHANISACE MEMEDELSTVI, Praha, Czechoslovakia, Vol. 5, No. 18, September 1955.

Monthly List of East European Accessions (EFAI), LC, Vol. 8, No. 9, September 1959. Unclassified.

HRDY, J.

"Fulfilling successfully the plan for mechanization of strenuous work in the animal industry."

MECHANISACE ZEMEDELSTVI, Praha, Czechoslovakia, Vol. 5, No. 20, October 1955.

Monthly List of East European Accessions (EEAI), LC, Vol. 8, No. 9, September 1959. Unclassified.

HRDY. J.

Hrdy, J.

Machine-tractor stations lessen the work in animal husbandry by mechanization of stables. p. 173.

Vol. 5, no. 9, May 1955 MECHANISACE ZEMEDILSTVI

SO: Monthly List of East European Accession, (EEAL), LC, Vol. 4, No. 9, Sept. 1955, Uncl.

HRDY, J.

Winter repairs of stable machinery and equipment.p. 10 (Mechanisace Temedelstvi Vol. 6, no. 1, Jan. 1056 Fraha)

\$0: Monthly List of East European Accession (EEAL) LC. Vol. 6, no. 7, July 1957. Uncl.

HRDY, J.

How to prevent a valve from falling in the cylinder. p. 11 (Hechanisace Zemedelstvi Vol. 6, no. 1, Jan. 1956 Praha)

SO: Monthly List of East European Accession (EEAL) IC, Vol. 6, no. 7, July 1957. Uncl.

HRDY, J.

HRDY, J. Activity of the group for stable mechanization in winter. p. 31.

Vol. 6, no. 2, Jan. 1956 MECHANISACE ZEMEKELSTVI ACRICULTURE Czechoslovakia

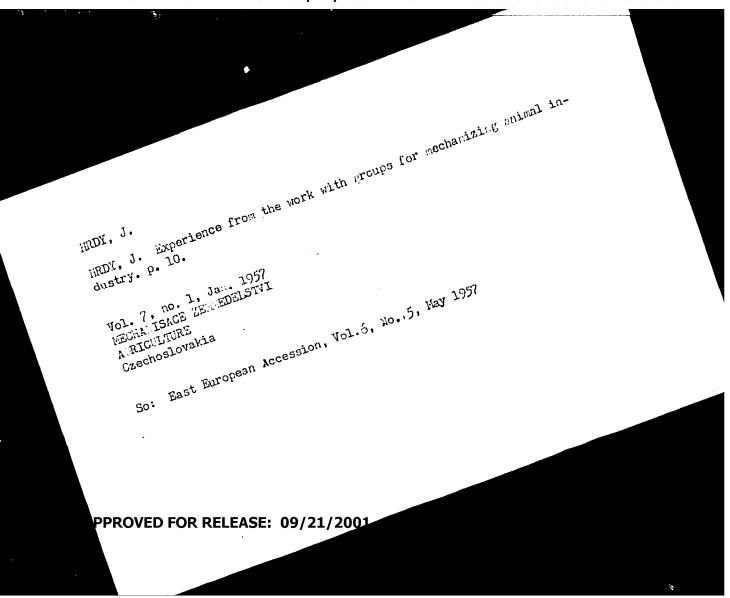
So: East European Accession, Vol. 6, No. 5, May 1957

HRDY, J.

HRDY, J. More attention to preparations for 1957. p. 514

Vol. 6, No. 21, Nov. 1956 MERCHANISACE ZEMEDEISTVI AGRICULTURE Praha, Czechoslovakia

So: East European Accessions, Vol. 6, No. 3, March 1957



HRDY, J.

HRDY, J. Prospects for mechanizing animal production. p. 65. (JH). Refireration of milk on farms in the United States, Great Britain, and Western Cermany. p. 65.

Vol. 7, 30. 3, Feb. 1957 MACHANISACE ZEMMEDELSTVI ACRICULTURE Czechoslovakia

So: East European Accession, Vol. 6, No. 5, Nay 1957

HRDY, J.

Mechanization should be purposeful and economical in animal production. p. 352. (MECHANISACE ZEMEDELSTVI, Vol. 7, No. 15, Aug 1957, Praha, Czechoslovakia)

SO: Monthly List of East Guropean Accessions (EEAL) LC, Vol. 6, No. 12, Dec 1957, Uncl.

HRDY, J.

Maintenance of machinery increases the efficiency of production.

p. 445. (Mechanesace Zemedlstvi. Vol. 7, No. 19, Oct. 1957, Praha, Czechoslovakia)

Monthly Index of East European Accession (FEAI) LC. Vol. 7, No. 2, February, 1958

HRDY, J.

Responsibility in handling milking machines.

p, 494 (MECHANISACE ZEMEDELSTVI) Vol. 7, no. 21, Nov. 1957, Praha, Czechoslovakia

SO: Monthly Index of East European Accessions (EEAI) LC, Vol. 7, No. 3, March 1958

HRDY, J.

The SMK 150 barn cleaner. p.237

MECHANISACE ZEMEDELSTVI. (Ministerstvo zemedelstiv a lesniho hospodarstvi) Praha, Czechoslovakia. Vol.9, no.10, Oct. 1959

Monthly List of East European Accessions (EEAI) LC, Vol.8, no.12 Dec. 1959 Uncl.

# HRDY, J.

Machine-tractor stations are intorducing manure and irrigation implements. p. 282.

Praha. MECHANISACE ZEMEDELSTVI. Vol. 9, no. 12, Dec. 1959.
Praha, Gzechoslovkia
East
Monthly list of European Accession (EEAI) LC Vol. 9, no. 2
Feb. 1960, Uncl.

HRDY M-

CZECHOSLOVAKIA/Chemical Technology - Chemical Products and Their Applications - Fermentation Industries. H.

Abs Jour

: Ref Zhur - Khimiya, No 11, 1958, 37761

Author

: Barta, J., Antony, K., Hrdy, M., Rosa, M.

Inst

: •

Title :

: Elimination of the Scale from Evaporators of Alcohol-

Molasses Plants.

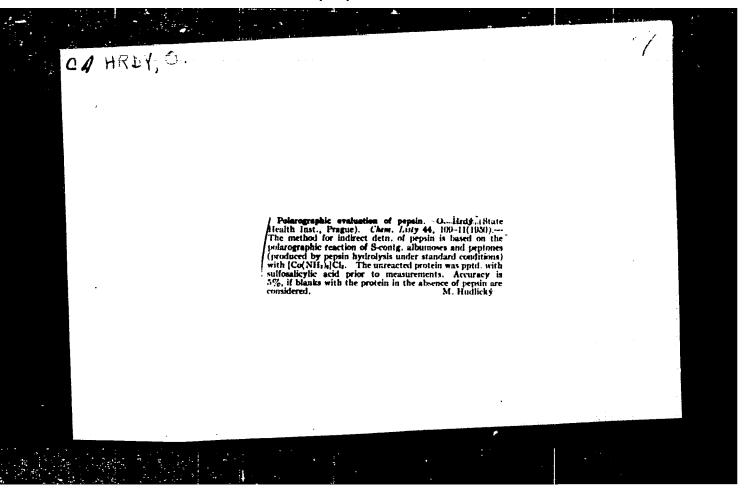
Orig Pub

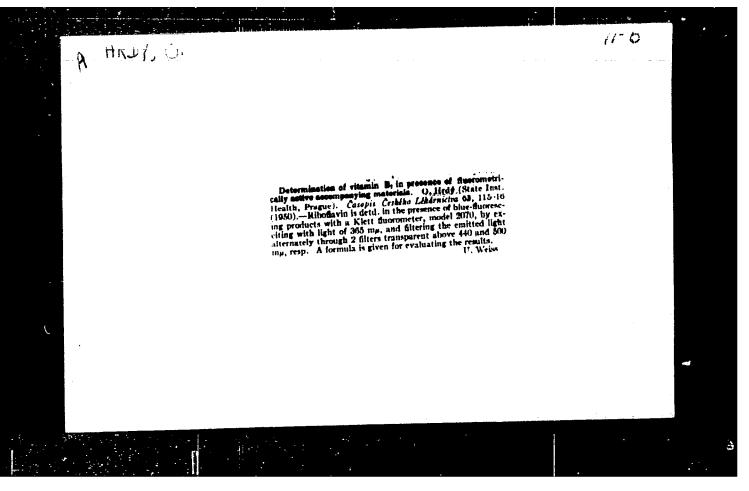
: Kvasny Prumysl, 1957, 3, No 10, 223-224

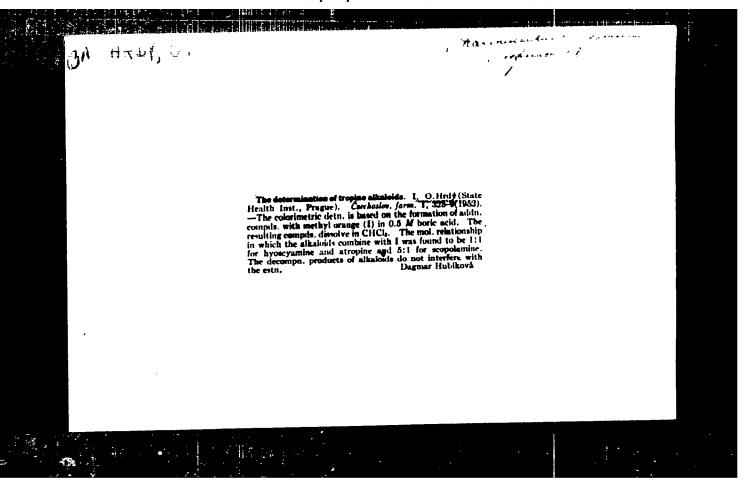
Abstract

: Elimination of scale from evaporators of alcohol-molasses plants by boiling with 3.5% lactic acid (from spent or technical grade 30-50% acid) for 1-3 hours is recommended. If the scale adheres it is necessary to rub it off immediately, before it hardens upon drying.

Card 1/1







HRDY, O.; JUNG, Z.

Folarographic determination of 1-hydrasinophthalazine and of 1.4-dihydrazinophthalazine. Cesk. farm. 3 no.6:194-196 Je 154.

#### HRDY. O.

Polarographic determination of tetrasodium salt of 2-methyl-1,4-naphthalenediol diphosphate (vitamin K). Cesk. farm. 3 no.6:196-199 Je \*54.

1. Ze Statniho wstavu pro kontrolu leciv v Praze.

(VITAMIH K, derivatives,

\*sodium menadiol diphosphate, determ., polarography)

(POLAROGRAPHY,

\*of vitamin K sodium menadiol diphosphate)

HRDY, O. Errors and precision in photometry. Cesk. farm. 4 no.5:

258-262 June 55.

(DRUGS, determination photometry, errors & precision)

CIA-RDP86-00513R000618220013-8" APPROVED FOR RELEASE: 09/21/2001

HRDY, O.; JUNG, Z.; SLOUF, A.

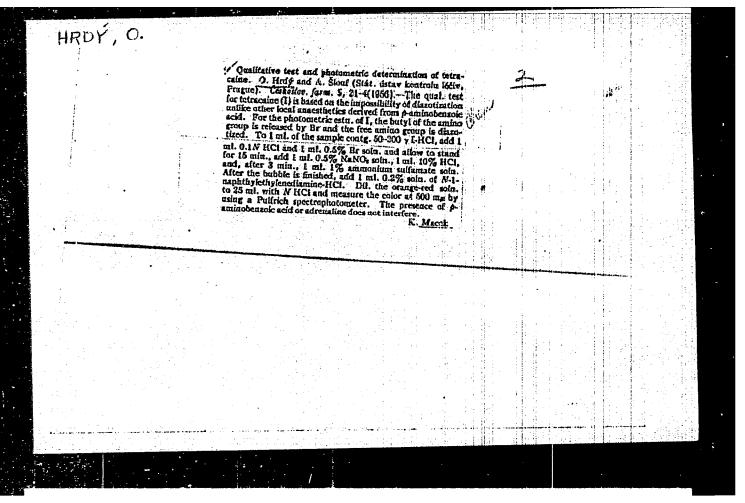
المناف والمستورد الأوسالة والمناف المعار والمواجع والمراجع والمراجع والمراجع والمراجع والمراجع والمراجع والمراجع

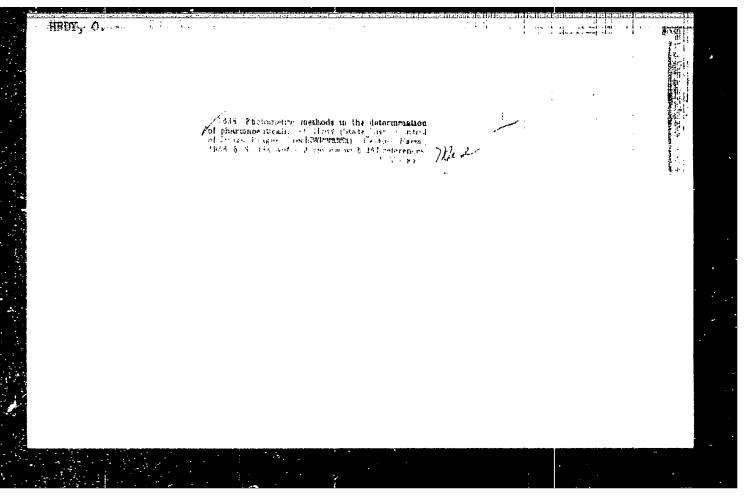
Identification, partition and determination of digitalis glycosides. 2. Partition and determination of single lanatosides and desacetyllanatosides in lanatoside ABC. Cesk. farm. 4 no.8:395-400 Oct 55.

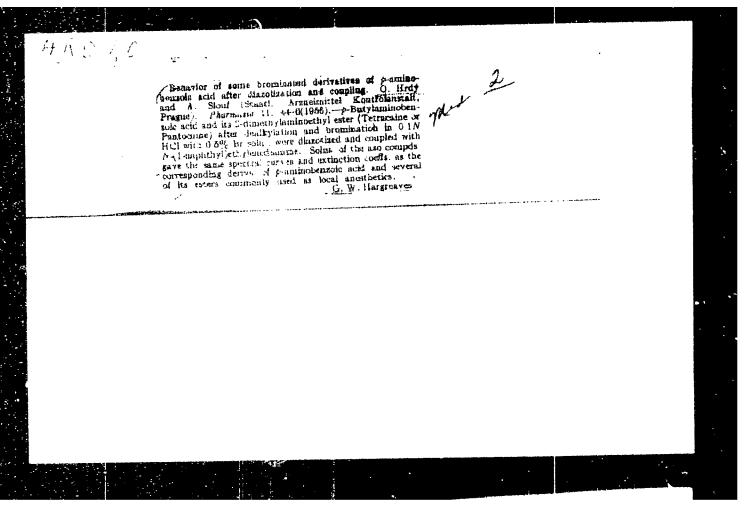
1. Ze statniho ustavu pro kontrolu leciv.

(DIGITALIS, determination

single lanatosides & desacetyllanatosides in
lanatosides ABC.)







CZECHOSLOVAKIA/Chemical Technology. Pharmaceuticals. Vitamins. Antibiotics.

H

Abs Jour: Ref Zhur-Khim., No 24, 1958, 82719.

: Hrdy O., Urbanova L. Author

Inst Title

: The Photometric Determination of Pyridoxine in

Pharmaceutical Preparations.

Orig Pub: Ceskosl. farmac., 1957, 6, No 9, 510-514.

Abstract: The method is based on the reaction of pyridoxine (I) with diethyl-p-phenylene-diamine (II) in the presence of oxidizing agents with the formation of blue indophenol dyestuff not stable in aqueous solution. The dyestuff is stable in benzene and has A maximum of 605 n.M. To the solution of I

: 1/3 Card

CZECHOSLOVAKIA/Chemical Technology. Pharmaceuticals. Vitamins. Antibiotics.

Abs Jour: Ref Zhur-Khin., No 24, 1958, 82719.

(10-200 micrograms) is added the phosphate buffer solution (pH 7), one ml of 0.1% solution of sulfate II and 10 ml benzene, one ml of 1% solution of ferricyanide K (III), and the dyestuff obtained is immediately extracted with benzene and the determination is carried out. The presence of other vitamin B complexes and compounds which are present with I biotin, methionin, cholin, betain) does not interfere with the determination. Ascorbic acid and salicylic acid and phenol interfere with the determination. Ascorbic acid reduces III and the amount of the latter must be accordingly increased. Salicylic acid forms a green dyestuff which is partially soluble in benzene, and salicylic acid must be ex-

card : 2/3

25

APPROVED FOR RELEASE: 09/21/2001 CIA-RDP86-00513R000618220013-8"

Н

CZECHOSLOVAKTA/Chemical Technology. Pharmaceuticals. Vitamins. Antibiotics.

H

Abs Jour: Ref Zhur-Khin., No 24, 1958, 82719.

tracted from an acidified solution prior to the reaction. The phenol forms a violet dye which has  $\lambda$  of 580 millimicrons. From the measured extinction the extinction must be subtracted which was measured after the benzene solution has been shaken with a 5% boric acid solution. Thus it is possible to carry out the determination in the presence of a considerable excess of phenol.

Card : 3/3

E-3 CZECHOSLOVAKIA / Analytical Chomistry. Analysis of Organic Substances.

: Rof Zhur - Khim., No 15, 1958, No 50065 lbs Jour

: Hrdy, O.; Potrikova, H. Luthor

: Photometric Determination of m-iminophenol in P-minosa-InstTitlo

licylic Acid.

: Coskosl. farmac., 1957, 6, No. 10, 587-589 Orig Pub

: The method of determination of very small amounts of maminophonol (I) in p-aminosalicylic acid (II) is based on \_bstract the reaction with diethyl-p-phonylonediamine (III) in the presence of K3Fo(CN)6 (IV). The dyo produced of I, the structure of which probably is that of indemine, is soluble in benzene, while the dye of the indephenel type, produced of II, does not pass from alkaline solutions into bonzono. The conclusions concerning the structure of

card 1/2

CZECHO3LOVAKIA / Analytical Chemistry. Analysis of Organic Substances.

E-3

Abs Jour : Rof Zhur - Khim., No 15, 1958, No 50065

those dyes were made based on the characteristic magnitudes of absorption maxima of their solutions in benzene and chloroform. To 5 ml. of the solution of Na salt of II containing 25-75 % of I, 2 ml. of 0.2% solution of III sulfate, 2 ml. of 1 N NH<sub>4</sub>OH, 10 ml. of benzene and 2 ml. of 2% solution of IV are added. After shaking the mixture for 20 sec., the benzene layer is separated, washed with the mixture of 3 ml. of water and 2 ml. of 1 N NH<sub>4</sub>OH, dried on anhydrous Na<sub>2</sub>SO<sub>4</sub> and photometered at 550 mM. The content of I is computed using a calibrating curve. The error of the determination is plus/minus 3 of I. -- N. Turkevich.

Card 2/2

**APPROVED FOR RELEASE: 09/21/2001** 

CIA-RDP86-00513R000618220013-8"

CZECHOSLOVAKIA / Physical Chemistry--Electrochemistry. B-12

: Referat Zhur--Khimiya, No. 11, 1959, 38011 Abs Jour

Hrdy; Oi Author

: The Behavior of Folic Acid and the Products of : Not given Tnst

Its Decomposition During Polarization. Title

t Chem Listy, 52, No. 6, 1058-1064 (1958) (in Orig Pub

Czech)

: Folic acid is reduced with the formation of a 2-11 separates into Abstract

electron wave which at pH two waves. At increased pH values the drop in the more positive wave follows the shape of the dissociation curve. The value of the recombination rate constant k hasbeen calculated as 4.3.

1013 liter mol-1 sec-1. The presence of two more negative waves in acid solutions is ex-

Card 1/3

CZECHOSLOVAKIA / Physical Chemistry -- Electrochemistry.

B-12

Abs Jour : Referat Zhur--Khimiya, No. 11, 1959, 38011

plained by the evolution of H<sub>2</sub> at the cathode. 2-amino-4-hydroxy-6-pteridine aldehyde is reduced with the formation of two waves. The first wave is accompanied at more negative E values by a second, concentration-independent wave, which the author ascribes to the adsorption of the oxidized form of the depolarizer. The height of both of the main waves likewise does not appear to be a linear function of the concentration of the pteridine aldehyde. The more positive wave is ascribed to the reduction of the pteridine nucleus and the more negative wave is ascribed to the reduction of 2-amino-4-hydroxy-pteridinecarboxylic acid produces one of the waves \( \subseteq \sic\_7 \), which is deformed in the pH

Card 2/3

45

CZECHOSLOVAKIA / Physical Chemistry -- Electrochemistry. B-12

Abs Jour : Referat Zhur--Khimiya, No. 11, 1959, 38011

range 11-12 as a result of recombination processes. The formation of pteridine alcohol has been studied and the possibility of the analysis of a mixture of folic acid with its decomposition products is discussed. -- P. Zuman

Card 3/3

#### CIA-RDP86-00513R000618220013-8 "APPROVED FOR RELEASE: 09/21/2001

Η

CZECHOSLOVAKIA/Chemical Technology. Chemical

Products and Their Applications. Medicinal Substances. Vitamins.

Antibiotics.

Abs Jour: Ref Zhur-Khimiya, No 6, 20551

: Hrdy, 0. Author

: = Inst : New Articles in the Czechoslovakian Pharma-Title

copoeia 2.

Orig Pub : Ceskosl. farmac., 1957, 6, No 3, 172-182

Abstract : No abstract.

: 1/1 Card

4-90

: Czechoslovakia B-12 COUNTRY

CATEGORY

1959, 30, 89513 ABS. JOUR. : RZKhim., No.

AUTHOR : Hrdy, 0. IMST.

TITLE : Polarographic Behavior of Folic Acid and of

Its Decomposition Products

ORIG. PUB. : Collect. Czechosl. Chem. Communs, 1999, 24, No 4, 1180-1187

: See RZhKhim, 1959, No 11, 38011. ABSTRACT

CaPD:

HRDY, O.; KOLOCOVA, J.

Corticosteroids. I. Partition chromatography of some corticosteroids. Cesk. farm. 11 no.4:185-187 162.

1. Stetni ustav pro kontrolu leciv, Praha.
(ADRENAL CORTEX HORMONES chem) (CHROMATOGRAPHY)

'Corticosteroids. II. Polarographic behavior of some corticosteroids. Cesk. farm. 11 no.4:192-196 '62.

1. Statni ustav pro kontrolu leciv, Praha.
(ADRENAL CORTEX HORMONES chem)
(CHEMISTRY ANALYTICAL)

Corticosteroids. III. Determination of triancinolone and some esters of corticosteroids. Cesk. farm. 11 no.5:255-259 Je 162.

1. Statni ustav pro kontrolu leciv, Praha.

(ADRENAL CORTEX HORMONES chem)

CZECHOSLOVAKIA

no academic degree indicated

State Institute for Drug Control, (Staatliches Institut für Arzneimittelkontrolle), Prague

Prague, Collection of Czechoslovak Chemical Communications, vol 27, No 10, Oct 62, pp 2447-2449.

"Polarographic Studies of Some Steroids"

CZUCHOSLOVAKIA

# CUTA, P; HRDY, O.

1. Technical Institute of Chemistry (Frague); State Institute of Erus Control (Frague)

Prague, Collection of Czechoslovak Chemical Communications, No 13, 1965, pp 3263-3270

"Spectrophotometric Examination of the Reactions of Mitrasin with Tydroxides and Sullites."

HRDY, O., inz. dr.

Stilbestrol diphosphate. Cesk. farm. 14 no.1:41-43 Ja 165

Stilbestrol dipropionate. Ibid.:43-44

Testosterone isobutyrate. Tbid.:44-45

Triamcinolone. Ibid.:47-48

1. Statni ustav pro kontrolu leciv.

On the pharmacopoeia article "Determination of light absorption. Cesk. farm. 12 no<sub>5</sub>9:478-482 Nº63

1. Statni ustav pro kontrolu leciv, Praha.

\*

# HRDY, Vaclay

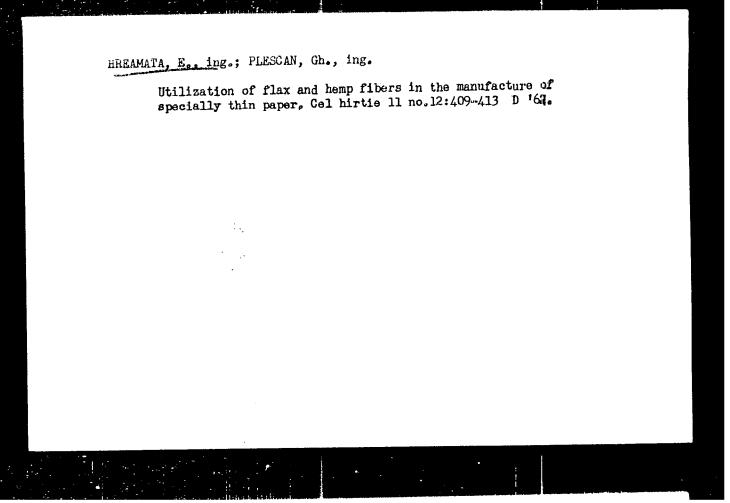
A TOTAL PROPERTY OF THE PARTY O

Calculation of the wage loss compensation for labor holidays to the workers in trade and public eating facilities. Prace mzda ll no.6:294-295 Je \*63.

# HRDY, Voitech, promovany geolog

Geologic use of electric logging interpretation in prospect boring in the Kladno-Rakovnik Basin. Geol Pruzkum 5 nc.ll: 339-340 N 163.

1. Geologicky pruzkum, n.p., Praha, zavod hlubokych vrtu, Tuchlovice.



HREBACKA, J. inz.

Improvement of laboratory work in coal preparation research in the Belgian Inichar Institute. Paliva 43 no. 12: 372-374 D '63.

: CLECHOSLOVAKIA HAL BA Processing of Solid Country Category Fossil Fuels : Ref Zhur-Khimiya, No 14, 1959, No Abs. Jour . Hrebacka, J. Author Institute : Adsorption of Phenols from Ammonia-Containing Title Waters by Coal Charge Mixtures Orig Pub. : Paliva, 1958, 38, No 2, 47-50 : Review of the capability of coal charge mixtu-Abstract res to adsorb phenols, contained in ammonia waters (AW) effluent from coke plants and la-boratories. Commercial investigations revealed the possibility of utilization of AW in the flotation of coals. Presented are ontimum conditions for the flotation. Commercial data indicate a possibility of lowering the consumption of flotation oils while phenol content in AW is simultaneously and substantially Card: 1/2 H-112

HREBACKA, J., inz.

Purification of waste water from the Velkobana Handlova coal washing plant. .aliva 44 no.12:361-363 D '64.

1. Scientific Coal Research Institute, Section Pokusne pradlo, Ostrava-Kuncicky.

HREBACKA, J., inz.

Use of chemical agents in coal preparation. Paliva 41 no.7:222-226 Jl '61.

1. Pokusne pradlo, Ostrava - Kuncicky.

# HREBACKA, J., inz.

Determining the granularity of particles below 60 microns by sedimentation balance. Paliva 41 no.9:371-377 S '61.

1. Vedecko-vyzkumny uhelny ustav, Pokusne pradlo, Ostrava - Kuncicky.

HREBACKA, J., inz.

Experience with the memphenolic flotation reagent Flotakol N in the dressing plants of the Ostrava-Karvina coal field. Paliva 43 no.6:162-169 Je 163.

1. Vedecko-vyzkumny uhelny ustav, Pokusne pradlo, Ostrava - Kuncicky.

HRBEK, Jaromir, Prof. Dr; HREBEK, Jan, Dr

Motor analysor. Neur. & psychiat. cesk. 17 no.3:142-149 Je '54.

1. Neurologicka klinika PU v Olomouci, prednosta: prof. Dr Jaromir Hrbek Ustav experimentalni pathologie lekarske fakulty v Plani, prednosta: Dr Jan Hrbek.

(CRMEBRAL CONTEX, physiology, \*motor analysor

HREBEK, Jan, MUDr

Curebral cortex as the complex of analysors. Neur. & psychiat. cesk. 17 no.3:149-155 Je '54.

1. Lekarska fakulta v Plsni. Ustav experimentalni pathologie, prednosta: MUDr Jan Hybek.

(CEREBRAL CORTEX, physiology, \*analysor funct.)

SAVICEVIC, M., Lj. PLTROVIC, U. LARTINIS, and F. HELBELJAN- OVIC, Labor Medicine Department (Odeljenje Medicine Rada), Public Health Institute of Serbia (Zavod za Zdravstvenu Zastitu)NR Srbije).
"Experimental Investigation of the Effect of Carbon Disulfide on Mice Exposed to Work Stations at the 'Viskoza' Factory."  Belgrade, Glasnik Zavoda za Zdravstvenu Zastitu HR Srbije, Vol 11. Nos 3-4, 1962, pp 51-58.
Abstract: /Ruthors' English summary modified Groups of mice (153 in all) were exposed to 8.5 to 200 gamma of carbon disulfide per liter of air 8 hours a day for 10 days. The control group numbered 40 mice. Subsequent microscopid study of liver, lungs, and brain tissue showed degeneration, peribronchial and subpleural extravasation, subependymal hemorrhage, and proliferation of the cerebral neurologia. Similar but milder changes were also noted in 1/1/the control group. No references.
114

HRBEK, Jar.; HRBEK, Jan; HAVLICEK, V.; HREBICEK, J.; SKLENOVSKY, A.

Epidural recording of electrical activity of the brain in a cat preparation in wakeful state. Activ. nerv. sup. 4 no.2:135-136 62.

1. Laborator VNC lekarske fakulty Palackeho university v Olomouci, katedra patologicke fyziologie lekarske fakulty Palackeho university v Olomouci.

(BRAIN physiol)

HRBEK, Jar.; HRBEK, Jan; HAVLICEK, V.; HREBICEK, J.; SKLENOVSKY, A.

Localization of cortical areas of analyzers in the cat. Activ. nerv. sup. 4 no.2:136-137 62.

1. Laborator VNC lekarske fakulty Palackeho university v Olomouci, katedra patologicke fyziologie lekarske fakulty Palackeho university v Olomouci.

(CEREBRAL CORTEX physiol)

HRBEK, Jar.; HRBEK, Jan.; HAVLICEK, V.; HREBICEK, J.; SKLENOVSKY, A.

The cortical area of proprioceptive analyzers, its somatotropic sectors and projection areola. Activ. nerv. sup. 4 no.2:137-138 162.

1. Laborator VNC lekarske fakulty Palackeho university v Olomouci, katedra patologicke fyziologie lekarske fakulty Palackeho university v Olomouci.

(CEREBRAL CORTEX physiol)

HRBEK, Jar.; HRBEK, Jan.; HAVLICEK, V.; HREBICEK, J.; SKLEMOVSKY, A.

The proprioceptive motor and interoceptive interomtor control circuit. Activ. nerv. sup. 4 no.2:138-I39 162.

1. Iaborator VNC lekarske fakulty Palackeho university v Olomouci, katedra patologicke fysiologie lekarske fakulty Palackeho university v Olomouci.

(CEREBRAL CORTEX physiol) (REFLEX CONDITIONED)
(MOVEMENT physiol)

HRBEK, Jar.; HRBEK, Jan.; HAVLICEK, V.; HREBICEK, J.; SKLENOVSKY, A.

The problem of local and distal recording of evoked potentials. Activ. nerv. sup. 4 no.2:139-140 \*\*\* 62.

1. Laborator VNC lekarske fakulty Palackeho university v Olomouci, katedra patologicke fysiologie lekarske fakulty Palackeho university v Olomouci.

(CEREBRAL CORTEX physiol)

HRBEK, Jan; DOCKAL, C.; HREBICEK, J.; SKLENOVSKY, A.; DOSTALOVA, K.; VIZINOVA, H.; POLASEK, J.

Concomitant autonomic reactions during the process of training in laboratory language. I. Studies on thermal changes. Activ. nerv. sup. 4 no.2:152-154 '62.

(BODY TEMPERATURE physical) (LEARNING) (LANGUAGE)

HRBEK, J.; SKLENOVSKY, A.; HREBICEK, J.

Contribution to the problem of the cortical localization of the proprioceptive analyzer. Cas. lek. cesk. 101 no.36:1090-1096 7 S '62.

HREBICEK, J.; KAMENICEK, O.; KOMENDA, S.; SCHROBER, B.

Evoked cortical responses in X-irradiated rats. Physiol. Bohemoslov. 14 no.1:70-78 165

1. Institute of Pathological Physiology, Central Radiological Institute and Institute of Medical Physics, Palacky University, Olomouc.

#### CZECHOSLOVAKIA

HREBICEK, J.: Department of Pathological Physiology, Medical Faculty, Palacky University, Olomouc.

"Neurodynamics of the Bemegride-Induced Generalized EEG Paroxysm."

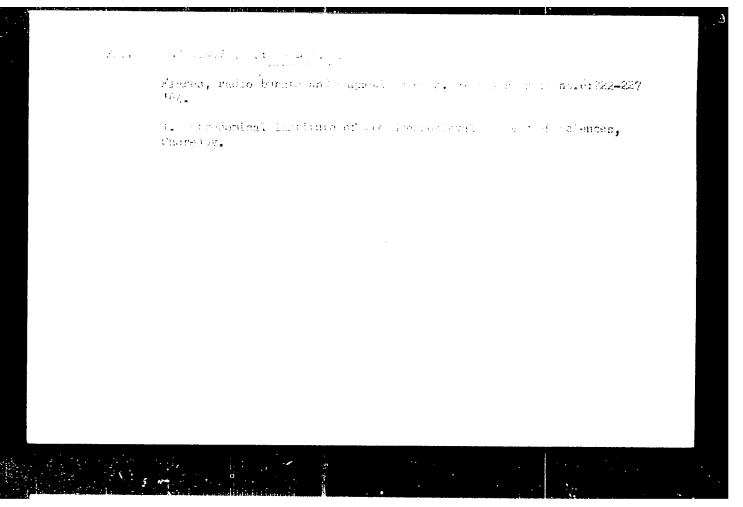
Prague, Activitas Nervosa Superior, Vol 8, No 2, Jun 66, pp 190-193

Abstract: Results of 30 experiments with unanesthetized cats, immobilized with Remyolan and artificially ventilated are described. Paroxysm cycle was elicited by intravenous administration of Bemegride. The preparoxysmal phase, developed paroxysm, and post-paroxysmal phase are discussed. Various functional structures participate in different ways in the stages of the development of the generalized paroxysm, and provide data for their functional-morphological characteristics. 2 Figures, 1 Table, no references. Submitted at the 4th Interdisciplinary Conf. of Exper. and Clin. Study of Higher Nerv. Functions at Mar. Lazne, 12-15 Oct 65. Article is in English.

1/1

CIA-RDP86-00513R000618220013-8" APPROVED FOR RELEASE: 09/21/2001

L 29416-66 ACC NR. AP6019956 SCURCE CODE: CZ/0079/65/007/003/0243/0243 AUTilOR: Hrebicek, S.; Kumpel, Q.; Sokol, I.; Topiar, A.; Grumlik, R.; Uhlir, F. ORG: Psychiatric Hospital, Opava (Psychiatricka lecebna) TITLE: Comparison of effects of classical and combined therapy in schizophrenia This paper was presented at the 7th Annual Psychopharmacological Meeting, Jesenik, 20-23 January 1965/ SOURCE: Activitas nervosa superior, v. 7, no. 3, 1965, 243 MOPIC TAGS: therapeutics, psychoneurotic disorder, drug treatment Pacification of the florid schizophrenic, his socialization; and his contact with the physician were investigated. 91 schizophrenic patients admitted to authors' hospital in 1954-1961 were studied. 39 patients received the classical convui-sive treatment and 52 the combined treatment. 76 patients improved during the treatment and 15 did not change. did not improve received the classical convulsion treatment. A significant difference in favor of the combined treatment including psychopharmacological treatment was noticed. An average of 29 days was needed to attain manageability using drugs, compared with 42 days with the shock treatment. For sociability the periods were 41 and 54, respectively, and for care of appearance 24 and 40 Torig. art. in Eng. 7 GPRS7 SUB GODE: 06/ SUBM DATE: none Card 1/1 / 1/



HREBIK, F.; KVICAIA, J.; KRIVSKY, L.; OIMR, J.

Observations of flares at the Ondrejov Observatory in the year 1962. Biul astr Cz 14 no.6:245-250 '63.

1. Astronomical Institute of the Czechoslovak Academy of Sciences, Ondrejov.

### HREBIK, F.; VANYSEK, V.

"The Dependence of the Photometric Constant N of Comets on the Heliocentric Distance. In English." p. 65 (BIULLETEN ASTRONOMICHESKIKH INSTITUTOV CHEKNOSLOVAKII. BULLETIN OF THE ASTRONOMICAL INSTITUTES OF CZECHOSLOVAKIA. VOL. 5, No. 4, July 1954; Praha, Czech.)

So: Monthly List of East European Accesseions, (EEAL), IC, VOL. 4, No. 4, April 1955, Uncl..

HREBIK, F.; VOKALOVA, E.

SCIENCE

Periodicals: BIULLETEN ASTRONOMICHESKIKH INSTITUTOV CHEKHOSLOVAKII. BULLETIN OF THE ASTRONOMICAL INSTITUTES OF CZECHOSLOVAKIA. Vol. 10% no. 2, Mar. 1959

HREBIK, F.; VOKALOVA, E. Radio signals from the artificial satellite. In english. p. 43

Monthly List of East European Accessions (EFAI) LC, Vol. 8, No. 5, hay 1959, Unclass.

\$/035/62/000/006/028/064 A001/A101

3.1720

AUTHORS: Hřebík. F., Kvíčala, J., Křivský, L., Olmr, J.

TITLE:

Observations of flares at the Ondřejov Observatory in the year 1960

PERIODICAL: Referativnyy zhurnal, Astronomiya i Geodeziya, no. 6, 1962, 59-60 abstract 6A446 ("Byul. astron. in-tov Chekhoslovakii", 1961, v. 12,

no. 5, 169-184, English; Russian summary)

TEXT: This is the regular report on observations of flares at Ondřejov (Czechoslovakia). Data are presented on 309 flares and related bursts of solar radio emission at frequencies 808. 536 and 231 Mc, as well as on atmospherics at a frequency of 27 kc. Figures are given which show the curves of time variations of Ha line width. There are 18 references.

I. Zh.

[Abstracter's note: Complete translation]

Card 1/1

CIA-RDP86-00513R000618220013-8" **APPROVED FOR RELEASE: 09/21/2001** 

ENT(1)/FCC(w)/BDS/EEC-2/ES(v) AFFTC/ESD-3 L 12770-63 Pe-4/Fo-4 s/169/63/000/004/001/017 68 AUTHOR: Hrebik, F., Kvicala, J., Krivsky, L. Observations of flares at the Ondrejov Observatory in 1961 TITLE: Referativnyy zhurnal, Geofizika, no. 4, 1963, abstract 4A71 PERIODICAL: (Biol. astron. in-tov Chekhoslovakii, v. 13, no. 5, 1962, 199-208; English, summary in Russian) TEXT: Data are presented on 157 flares and radio but its associated with them at frequencies of 9400, 808, 536, and 231 megacycles, also data on atmospherics at 27 kilocycles recorded in 1961; also there are curves of changes in the width of the Ex line plotted vs. time. Author's summary. Abstracter's note: Complete translation. Card 1/1

SOBRA, J.; SEDLAKOVA, E.; HREBIKOVA, A.

Congenital disorders of lipid metabolism. X. Familial hyper-cholesteremic xanthomatosis - detection of hyperproteinemia. Cas. lek. cesk. 102 no.25:699-700 21 Je '63.

1. III interni klinika fakulty vseobecneho lekarstvi KU v Praze, prednosta akademik J. Charvat Angiologicka laborator fakulty vseobecneho lekarstvi KU v Praze, reditel prof. dr. B. Prusik.

(XANTHOMATOSIS) (HYPERCHOLESTEREMIA)
(BLOOD PROTEIN DISORDERS)

#### CZECHOSLOVAKIA

SOBRA, J., SEDLAKOVA, E., and HREBINKOVA, A., Third Clinic of Internal Fiedicine (III. interni klinika), Faculty of General Medicine (Fakulty vseobecneho lekarstvi), Charle University, Prague, Academician J. CHARVAT, director; and Angiological Laboratory (Angiologicka laborator), Faculty of General Medicine, Charles University, Prague, Prof. Dr. B. PRUSIK, director [individual affiliations cannot be determined].

"Congenital Defects in the Lipid Metabolism. X. Familiar Hypercholesterol Xantomatosis. A Finding of Hyperproteinemia"

Prague, Casopis Lekaru Ceskych. Vol CII, No 25, 21 June 63, pp 699-700.

Abstract: Described is a test the purpose of which was to eliminate the interference of an increased level of blood lipides in the refractometric test. Serum nitrogen was determined by means of a microchemical method and a gradient cylinder was used to determine proteinemia, both operations being part of a refractometric determination. A table contains comparative data found in normal persons and patients suffering from familiar hypercholesterol xantomatosis. Sixteen references, including 13 Czech.

1/1

# HREBOUT, Vaclay

Some urgent organization problems in the glass and ceramic industries. Sklar a keramik 13 no.5:124-125 My '63.

1. Ministerstvo spotrebniho prumyslu, Praha.

# HREBOUT, Vaclav

Time analysis of the controlling activities of managers. Podnik organizace 17 no.2:61-64 F '63.

1. Ministerstvo spotrebniho prumyslu.

GINKO, Tadeusz; ADAMCZYK, Roman; SADLINSKI, Czeslaw; ORLOW, Tadeusz; HUCCZECHA, Maciej

Home- and heteroplasty of the aorta by means of experimental lyophilized grafts. Polski przegl.chir. 31 no.11:1169-1175 N '59.

1. Z II Kliniki Chirurgicznej Sl. A. M. w Zabrzu Kierownik: prof. dr J. Gasinski.

(AORTA transpl)

ADAMCZYK, Roman; CZOPIK, J.; GRZBIELA, J.; HRECZECHA, M.; GREGORCZYK, K.; MATULEWICZ, S.

Angiography of the coronary arteries. Pol. przegl. radiol. 29 no.4:401-407 Jl-Ag '65.

1. Z II Kliniki Chirurgicznej Slaskiej AM (Kierownik: prof. dr. J. Gasinski), z Zakladu Radiologii Slaskiej AM (Kierownik: doc. dr. med. B. Romanowski) i z Kliniki Chorob Wewnetrznych Slaskiej AM (Kierownik: prof. dr. med. J. Japa).

	L 13246-66 ACC NR: AP600604 SOURCE CODE: CZ/0053/65/014/004/0295/0295
	AUTHOR: Hrdina, P.; Kovalcik, V.
	OKG: Department of Pharmacology, Medical Faculty, Comenius University, Bratislava (Katedra farmakologie Lek. fak. UK)
	TITIE: Role of adrenotropic substances in changes in the effectiveness of indirect anticoagulants [This paper was presented during the Twelfth Pharmacologic Days,
	SOURCE: Ceskoslovenska fysiologie, v. 14, no. 4, 1965, 295
	TOPIC TAGS: pharmacology, drug effect, nervous system drug, coagulation, blood  ABSTRACT: The effect of works.
	ABSTRACT: The effect of various drugs on ethyl dicommarol acetate-reservine,
	Vidrasic affect of manny in the work of the state of the
	lacter; noradranaling interest of delication of premedication with the
	JPRS
	SUB CODE: 06 / SUBM DATE: none / ORIG REF: OOL
	Card 1/1
:	

Foliability of determination of local acid. Cesk. farm. 14 no.7:359-361 S 165.

1. Statni ustav pro kontrolu leciv, Fraha.

### HREHUSS, B.

Statistical reporting of cotton spinning production. p. 402.

INDUSTRIA TEXTILA. (Asociatia Stiintifica a Inginerilor si Tehnicienilor din Rominia si Ministerului Industriei Usoare) Bucuresti. Vol. 6, no. 11, Nov. 1955.

So. East European Accessions List Vol. 5, No. 9 September, 1956

HUNGLRY/Nuclear Physics - Installations and Instruments. Methods C-2 of Measurement and Research

Abs Jour : Ref Zhur - Fizika, No 4, 1959, No 7458

Author : Hrehuss G., Neszmelyi A., Simonyi K.

Inst : Polytechnic University, Budapest, Hungary
Title : A Fast Neutron Time-of-Flight Spectrometer

Orig Pub : Period. polytechn. Electr. Engng., 1958, 2, No 2, 131-140

Abstract: A description of a procedure and an experimental setup for the measurement of spectra of neutrons in the energy range from 0.8 to 14 Mev. The spectrometer is intended for the measurement of spectra of inelastic scattering of (DD) and (DT) neutrons by various nuclei. The experimental arrangement is similar essentially to that employed by Cranberg and Levin (Referat Zhur Fizika, 1957, No 4, 8792). Brief neutron pulses (2-3 millimicrons-seconds) were obtained by deflecting the deuteron beam, incident on the diaphragm, by means of a high frequency electric field (4-8 mc). Deuterons with energies of 200 ky, were obtained with a Cockroft-Walton

Card : 1/3

7

HUNGLRY/Nuclear Physics - Installations and Instruments. Methods C-2 of Mnasurement and Research

Abs Jour: Ref Zhur - Fizika, No 4, 1959, No 7458

generator. The pulsating current of the deuterons inc ident on the target amounted to approximately 1 microsumpere. With such a current, the yield of (DD) and(DT) neutrons amounted to 106 and 107 neutrons per second, respectively. The neutrons were detected with a scintillation counter. The measurement of the time-of-flight were made with a singlechannel system, which registered the coincidences between the pulses corresponding to the deuteron pulses, shifted by a suitable phase, and the pulses from the scintillation counter. The resolving time of the coincidence circuit is 3 x 10-9 sec. The phase shift was realized by means of a broadband scheme, that incured phase variation from 0 to 360°. The coincidence-counting rate was measured as a function of the phase shift (time delay). The exclude registration of coincidences due to neutrons arising in the preceding deuteron pulse, the output was passed from the coincidence circuit through a system of "gates," the control of which was : 2/3

# APPROVED FOR RELEASE: 09/21/2001 CIA-RDP86-00513R000618220013-8"

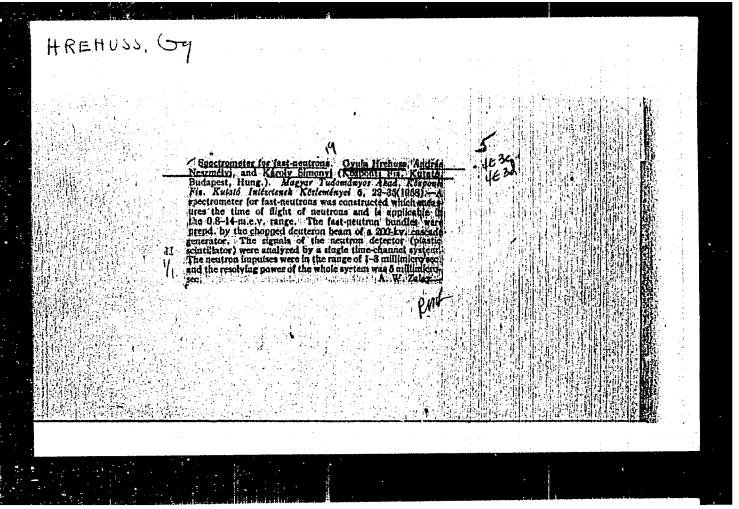
HUNG.RY/Nuclear Physics - Installations and Instruments. Methods C-2 of Measurement and Research

Abs Jour : Ref Zhur - Fizika, No 4, 1959, No 7458

by means of the pulse from the last dynode of the photomultiplier. The pulse was amplified and after amplitude discrimination it was applied to the circuit. To check the operation of the spectrometer, the 14 Mev line of (DT) neutrons was plotted. -- B.A. Levin

Card : 3/3

Card



#### HREHUSS, Gyula Spectral mass discrimination by CsJ/Tl crystal. Koz fiz kozl MTA 8 (EEAI 10:4) no.2/3:107-113 '60.

1. A Magyar Tudomanyos Akademia Kozponti Fizikai Kutato Intezete, (Photons)

(Scintillation counters) (Particles)

SALACEAN, T.; HRELESCU, M.; STOLANOVICI, P.

Some considerations on protection substances in ceramic flux. Studii tehn Timisoara 7 no.3/4:287-296 J1-D '60.

STOIANOVICI, P.; SALAGEAN, T.; HRELESCU, M.

Installations for the automatic beading of the used bandages in tramway wheels. Studii tehn Timisoara 9 no.1/2:163-170 Ja-Je \*62.

HRELESCU, Mircea; POPOVICI, David; BAI, Frideric

Alloying mild steel with chromium and manganese in automatic build-up welding with band electrodes. Constr mas 15 no. 2: 77-80 F 164.

HRELESCU, Mircea, ing.; POPOVICI, David, ing.

Cutting metals at the temperature of stars. St si Teh Buc 16 no. 5: 34-35 May :64.

8/137/62/000/011/036/045 A006/A101

AUTHORS:

Salagean, Traian, Hrelescu, Mircea, Stoianovici, Petre

TITLE:

Alloying soft steels with chromium and manganese in an electric arc

PERIODICAL:

Referativnyy zhurnal, Metallurgiya, no. 11, 1962, 7, abstract 11E42 ("Zváranie", 1962, v. 11, no. 5, 139 - 141, Slovak.; summaries in

Russian, German and English)

TEXT: The authors present results of research work conducted in the welding department of the Laboratory of technical materials at the Technical Institute in Timishoar (RNR). The process of alloying built-up metal in arc hardfacing of low carbon steels was studied. In manual welding the alloying elements were added to the coating, and in automatic welding to the ceramic fluxes. Alloying with two elements, Cr and Mn, is discussed. The Mn content in the builtup metal varied within a range of 0.7 - 16.5%. At a Mn content as high as 2 -2.5%, martensite appears; at 3.1 - 3.2% the structure becomes entirely martensitic and at 3.5 - 4.0% austenite appears and cracks are forming. Hardness of the built-up metal with variable Mm content is highest at 3.1 - 3.2%. The Cr

Card 1/2